

APPROVED MEETING MINUTES
SOUTH CAROLINA SHORELINE CHANGE ADVISORY COMMITTEE
September 14, 2007 – 9:30am-4:00pm

This document is not intended to be a meeting transcript, *per se*. It is a summary of key themes and some (though not all) of the background dialogue. The meeting summary's structure roughly parallels that of the meeting agenda but is not necessarily true to the temporal order of discussion. A digital recording of the meeting is located at SCDHEC-OCRM's Charleston office.

In Attendance:

1) Advisory Committee members:

Jeff Allen,	Clemson University
Sara Brown,	U.S. Army Corps of Engineers
Jimmy Carroll,	Carroll Realty
Jimmy Chandler,	S.C. Environmental Law Project
Mary Conley,	The Nature Conservancy
Toni Connor-Rooks,	City of Folly Beach
Paul Conrads,	U.S. Geological Survey
Rick DeVoe,	S.C. Sea Grant Consortium
Kirstin Dow,	University of South Carolina
Josh Eagle,	University of South Carolina
Paul Gayes,	Coastal Carolina University
Bob George,	G. Robert George & Associates, Inc.
Tina Hadden,	U.S. Army Corps of Engineers
Tim Hall,	U.S. Fish & Wildlife Service
Scott Harris,	Coastal Carolina University
Mike Katuna,	College of Charleston
Norm Levine,	College of Charleston
Jim London,	Clemson University
Chris Mack,	Dewberry, Inc.
Jim Morris,	University of South Carolina
Jeff Payne,	NOAA Coastal Services Center
Linda Tucker,	City of Isle of Palms
Bob Van Dolah,	S.C. Department of Natural Resources
Nancy Vinson,	S.C. Coastal Conservation League

2) S.C. Department of Health & Environmental Control:

Earl Hunter,	Commissioner
Carolyn Boltin,	OCRM Deputy Commissioner
Sue Waltz,	OCRM Assistant to the Deputy Commissioner
Braxton Davis,	OCRM Science & Policy Director
Barbara Neale,	OCRM Regulatory Director
Bill Eiser,	OCRM Staff Oceanographer
Elizabeth Von Kolnitz,	OCRM Planning Director
Dan Burger,	OCRM Communication & Technical Services Director
Melissa Rada,	OCRM Science & Policy Program Coordinator
Matt Slagel,	NOAA Coastal Management Fellow

3) S.C. Office of Human Resources

Nathan Strong,	Facilitator
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Welcome and Introductions:

Earl Hunter, Commissioner of South Carolina's Department of Health & Environmental Control (SCDHEC), welcomed the Committee members to the meeting and expressed his appreciation for their willing participation on the Committee. Each Committee member stood and introduced themselves to the group.

Carolyn Boltin, Deputy Commissioner of DHEC's Office of Ocean and Coastal Resource Management (OCRM) also extended a warm welcome to the Committee members, and stressed the importance and timeliness of discussing shoreline change and related management challenges in South Carolina. Ms. Boltin provided an overview of OCRM's role within the State and among the coastal management community.

OCRM Staff Presentations:

Braxton Davis, Director of OCRM's Science & Policy Division, discussed the role and the organizational framework of the Advisory Committee within South Carolina's Shoreline Change Initiative. Besides the Committee, other ongoing and future projects under the Initiative include: a shoreline change "State of Knowledge" report, a "meta-analysis" of past beach renourishment projects, an analysis of the State's shoreline retreat policy, a re-evaluation of beachfront long-term erosion rates, employment of a NOAA Coastal Management Fellow, acquisition of Pictometry® imagery, a pilot study involving an alternative shoreline erosion control structure, and the expansion of OCRM's technical capabilities.

Barbara Neale, Director of the Regulatory Division, discussed with the Committee that OCRM has direct permitting authority within the Critical Area (beaches, tidal creeks, marshes, and open water) and direct (land disturbing) and indirect authorities (consistency determinations) in the upland. Of the Critical Area permit applications that OCRM receives, ~76% are for docks and piers, ~17% are for bulkheads and revetments, ~5% are for marinas and community docks, ~3% are for boat ramps, and ~1% are for the beachfront. OCRM defines waterfront property as upland sites with straight-line extensions of shore perpendicular upland property lines that are within 1,000 feet of a navigable waterway. Also, critical lines must be signed and dated by OCRM staff to be valid, and they are good for 5 years, except for eroding streambanks.

Bill Eiser, Staff Oceanographer, provided an overview of beachfront management in South Carolina, from the 1977 enactment of the SC Coastal Zone Management Act through today. Until 1988, beachfront seawalls were routinely built, the regulatory "critical line" was set at the landward toe of the primary dune or scarp line, and OCRM (formerly the Coastal Council) had limited beachfront jurisdiction. A Blue Ribbon Committee on Beachfront Management convened in 1987, amid concerns that tourism dollars would decline if beach erosion and hard erosion control continued. The Beachfront Management Act was passed in 1988, and two lines of jurisdiction were established: the baseline and the setback line. The Act initially allowed replacement of destroyed seawalls with sloping structures 10 feet from the building foundation, but no

construction seaward of the baseline, no new seawalls, and only limited construction between the baseline and setback lines (new houses limited to 5,000 sf) (Existing Planned Unit Developments were exempt from the limited construction between the baseline and setback line rule).

Some revisions were made to the Beachfront Management Act in 1990: construction seaward of the baseline may now be authorized, Folly Beach is partially exempt due to impacts from the Charleston Harbor jetties, destroyed seawalls cannot be rebuilt, and “destroyed thresholds” are set as follows: Seawalls would be considered destroyed if they were more than 80% damaged in 1990, 66.67% damaged in 1995, or 50% damaged in 2005 (sliding scale). Also, houses are considered destroyed if damaged more than 66.67%. Limited construction seaward of the baseline can include beach access walkways, wooden decks (144 sq ft), replacement pools (if protected by erosion control structures), landscaping, public fishing piers, and special permits. About 60 “special permit” houses have been allowed statewide. These houses cannot have a seawall as part of the foundation, and they can never be greater than 5,000 square feet, further seaward than either neighboring house, or located on the primary dune or active beach. Furthermore, if water reaches under the house during high tide over a period of time, removal of the structure is required. On Folly Beach, the baseline must follow the line of existing erosion control structures, the local government must agree to the baseline position, there is no setback line, and destroyed seawalls can be rebuilt. Shore perpendicular structures (groins) are not considered erosion control structures, and they are allowed under a 2002 Beachfront Management Act amendment. Groins are only permitted in areas where all of the following conditions exist: threatened development, high erosion rates, concurrent renourishment, and a dedicated financial commitment and plan for future renourishment.

Elizabeth Von Kolnitz, Director of the Planning Division, discussed the role of the Division in assisting local governments with comprehensive planning. For example, Special Area Management Plans (SAMPs) are large-scale planning efforts in coastal regions that cross jurisdictional boundaries. Currently, the Division is developing a Waterbody Management Planning procedure, with an ongoing pilot project in Bluffton, SC. This work will build on a new water body classification system that assesses vulnerability, threats, etc. for specific coastal waterbodies. In addition, eighteen coastal communities are encouraged to develop or update their Local Beachfront Management Plans in accordance with the SC Beachfront Management Act. Localities are only eligible for state funds for renourishment if they have an approved local plan, and the local plan must be reviewed every 5 years.

Future Meeting Schedule:

Next meeting: Public Comments and Outside Perspectives: November 30, 2007
Third meeting: Research and Information Priorities: January 25, 2008

Q&A with OCRM Staff:

A Committee member inquired about the role of the Advisory Committee vs. the role of a future Blue Ribbon Committee. OCRM staff responded that it is presently uncertain whether or not a Blue Ribbon Committee will convene after the year of Advisory Committee meetings. The Advisory Committee will have the opportunity to explore general policy options to assess pros and cons, levels of support, barriers to consensus, etc. All explored options will be described in a final report; if any options would involve new agency policies, regulations, or statutes; or changes to existing agency policies, regulations or statutes, a Blue Ribbon Committee could be convened to consider those options at the discretion of the DHEC Board or the General Assembly.

A Committee member asked for clarification regarding the rule that seawalls may be rebuilt as sloping structures 10 feet from the foundation of a house. OCRM staff explained that this regulation was a part of the 1988 Beachfront Management Act, but a 1990 revision to the Act stated that destroyed seawalls could no longer be rebuilt.

A Committee member asked who moves the baseline when it is petitioned to do so, and what criteria are used in this decision. OCRM staff responded that the 1990 amendments to the Beachfront Management Act state that the baseline can move seaward, and this is decided by the Administrative Law Court (ALC). OCRM can agree with or reject a petition based on investigative work and survey data from at least one year after the date of the petition. A follow-up question was asked regarding how many petitions to move the baseline seaward have been accepted. In OCRM staff's recollection, the Grand Strand area, following a large renourishment project, and three other areas have had successful petitions to move the baseline seaward.

A Committee member asked how "high" erosion rates are defined. OCRM staff responded that in South Carolina, about 5 ft/yr of erosion is considered high by OCRM staff, but this may depend on other factors – the specific rate is not specified in the regulations.

A Committee member stated that rather than petitioning the Administrative Law Court to move the baseline seaward, the permitting agency should be petitioned instead. Of the lines that have been moved seaward, have erosion problems occurred later? OCRM staff answered that these areas have not experienced additional significant erosion because continuous renourishment projects have been performed.

A Committee member wondered whether we envision a shoreline management program that will address both beachfront and non-beachfront (marsh). OCRM staff responded that this is a programmatic option that the Committee may explore if it desires during the course of future meetings. It was pointed out that the local government frequently has setbacks and buffers for the non-beachfront areas while the State does not.

Several Committee members were concerned about the lack of clarity in the Charge to the Committee, and they asked if they were meant to simply give advice to SCDHEC-OCRM concerning its policies. Similar questions involved what the Committee was being driven by or responding to, and what should be focused on and accomplished. OCRM staff responded:

- 1) The Charge will be clarified by OCRM, and revisited by the Committee during the next meeting. It was emphasized that the Committee can explore options outside of existing DHEC policies and activities; these can be grouped into different sections of the final report (DHEC options; Other federal, state, local options).
- 2) The Committee is driven by the fact that 20 years have passed since the original Blue Ribbon Committee on Beachfront Management convened, and much research has occurred during that time (new projections for sea level rise, etc.). Renourishment has kept pace with erosion in many areas, but in some areas, the state's "retreat" policy may come into play sooner than later due to long-term, chronic erosion and the potential for major storm events in our region. In addition, the 1987 Blue Ribbon Committee on Beachfront Management did not address similar issues that have arisen for non-beachfront shorelines in the coastal zone ("sheltered coasts").

A Committee member asked if 18 local communities have approved local Beachfront Management Plans, or if 18 local communities are eligible to submit the plans but all have not done so. Are the plans required or voluntary? OCRM staff answered that local plans were "required" but the language in the statute is somewhat unclear. Of the 18 eligible communities, 13 communities actually possess approved plans (submitted in 1992), and one local community has submitted a local Beachfront Management Plan recently, which is currently being reviewed.

A Committee member stated the importance of listening to the public and recommended that the Committee not take any topics off the table until after the public hearing of the second meeting. There was a general consensus that this is a good idea.

A Committee member suggested that relevant reference materials be provided for each topic area via the Advisory Committee website. OCRM staff agreed, and Committee members may suggest/provide additional references for the website.

A Committee member inquired if there is overlap between the Council on Coastal Futures (CCF) report and what this Advisory Committee is trying to accomplish. OCRM staff will provide the relevant shoreline and beachfront recommendations from the CCF to the Committee at the next meeting.

A Committee member asked how many of the 800 dock applications each year are successful. OCRM staff answered that ~97-98% of the applications are eventually approved. Many approvals require that certain modifications or special conditions be met. As a follow-up, a member asked if it is known how many acres of marsh are crossed by

docks each year. The feasibility of obtaining this information is currently being explored by OCRM.

A Committee member asked if anyone is trying to determine what other states' rules, regulations, and outside perspectives are with regard to shoreline change. Also, what are the current regulations for building on receding shorelines according to FEMA? OCRM staff responded that speakers from NC and GA will be invited to present at the second meeting to discuss their states' regulations and perspectives. And in OCRM staff's understanding, FEMA's Flood Insurance Program and related local flood ordinances are based on historic flood zones only (e.g. V-zone, A-zone), and do not take into account future sea level rise projections or erosion rates in South Carolina.

A Committee member asked if local buffers are part of the local Beachfront Management Plans. OCRM staff responded that buffers are not required as part of local Beachfront Management Plans, which will be discussed in more detail at a future Advisory Committee meeting.

Overview of Process and Work Plan:

A Committee member suggested that South Carolina's Beachfront Retreat Policy should be discussed prior to addressing the Beach Renourishment and Beachfront Erosion Control topic areas. The Committee agreed with this comment, so the Work Plan will be altered, and the Beachfront Retreat Policy meeting will become the 4th meeting (after Research and Information Priorities, and before Beach Renourishment).

Nathan Strong then led the Committee in a discussion of what topics should be discussed during each topic-oriented meeting – in addition to the topics identified in the Draft Work Plan. The following list is a breakdown of the additional topics that the Committee thought should be discussed during the future meetings:

Beachfront Retreat Policy:

- Identifying vulnerabilities, vulnerable areas
- Adaptation to sea level rise
- Thresholds: at what point should retreat be implemented?
- Revisit petitions for seaward movement of baseline
- Local government rules/plans (successes/failures; other state examples)
- Is retreat still an appropriate policy? Alternatives?
- Protected resources - endangered species (e.g. turtles) and role in policy making
- Costs/Benefits of retreat
- Amortization schedules
- Post-storm redevelopment planning
- Long-term erosion rate calculation

Beach Renourishment:

- Consequences of activities (public perception)
- Cost-benefit analysis

- Changing context: ratio of federal to state funding, local, etc.
- Effects of sea level rise on projected needs
- Sources/Alternatives? (recycled glass, etc.)
- Funding mechanisms/access connection: public funds, public access
- Short and long-term environmental consequences
- Availability/quality of sand resources (jurisdictions)
- MMS speaker/input: Minerals Management Service perspective

Beachfront Erosion Control:

- Alternative designs/technologies
- Emergency Orders – legal implications
- Enforcement
- Public outreach
- Erosion control vs. property rights: options?
- Vulnerability and adaptation questions
- Real estate disclosure
- Offshore dynamics
- Accretion (man-made and natural)

Shoreline Planning:

- Local government plans and ordinances
- Resilient communities
- CBRA: Coastal Barrier Resources Act
- Ocean resource management and interconnectivity with shoreline change
- Building standards for properties in setback zones
- Technical assistance and whose responsibility?
- Post-storm redevelopment planning

Sheltered Coastlines: Erosion and Erosion Control

- Shoreline inventory of structures
- Wetland migration/refugia
- Alternative erosion control technologies/approaches

Sheltered Coastlines: Shoreline Development

- Impact of development density
- Role of state land acquisitions as regulatory alternative
- Concept of setbacks
- High marsh/low marsh issues
- Public access and buffers
- Dredging
- Structural vulnerability (V-zone vs. A-zone)
- Support infrastructure
- Critical area definition revision based on salinity
- Flood insurance

Next Steps and Agreements:

- 1) The next meeting, “Public Comments and Outside Perspectives,” will take place on **November 30, 2007**.
- 2) The third meeting, Research and Information Priorities, will take place on **January 25, 2008**.
- 3) The Committee is encouraged to review the Draft Process for Policy Options that was handed out at the meeting and to be prepared to discuss this process at the meeting on November 30.
- 4) OCRM will clarify the Charge to the Committee, and the revised version will be discussed at the next meeting.
- 5) OCRM will provide the relevant shoreline and beachfront recommendations from the Council on Coastal Futures report to the Committee at the next meeting.
- 6) OCRM will revise the Draft Work Plan to make Beachfront Retreat Policy the first topic area discussed. The dates for the first two meetings and additional topics for discussion will also be included.
- 7) Prior to the next meeting, OCRM will send the Committee an agenda, potential dates for future meetings, the revised Charge, and draft meeting minutes so that these items may be reviewed.
- 8) OCRM will post staff presentations from the first meeting, draft meeting minutes, an agenda for the second meeting, a finalized work plan, and a list of the Committee members to its website at:
http://www.scdhec.gov/environment/ocrm/science/shoreline_comm.htm